Title (en)

LIQUID CONTACTING OF POST-QUENCH EFFLUENT VAPOR STREAMS FROM OXYGENATE TO OLEFINS CONVERSION TO CAPTURE CATALYST FINES

Title (de)

VORRICHTUNG UND VERFAHREN ZUM INBERÜHRUNGSBRINGEN EINES QUENCH-ABWASSERS VON DER UMSETZUNG VON SAUERSTOFF ENTHALTENDEN VERBINDUNGEN ZU OLEFINEN ZUM ENTFERNEN VON KATALYSATORTEILCHEN

Title (fr)

MISE EN CONTACT D'UN LIQUIDE ET D'UN FLUX DE VAPEUR D'EFFLUENTS ISSUS DE LA CONVERSION DE COMPOSES OXYGENES EN OLEFINES APRES LAVAGE AFIN DE CAPTURER DES FINES CATALYTIQUES

Publication

EP 1656435 A1 20060517 (EN)

Application

EP 04755487 A 20040617

Priority

- US 2004019341 W 20040617
- US 62996303 A 20030730

Abstract (en)

[origin: US2005027152A1] A process is provided for converting oxygenate to olefins from a fluidized bed reactor which comprises removal of catalyst fines from a quenched vaporous effluent by contacting with a liquid low in catalyst fines content, e.g., oxygenate feedstock, or by-product water from the oxygenates to olefins conversion which is stripped and/or filtered. The process typically comprises: contacting a feedstock comprising oxygenate with a catalyst comprising a molecular sieve under conditions effective to produce a deactivated catalyst having carbonaceous deposits and a product comprising the olefins; separating the deactivated catalyst from the product to provide a separated vaporous product which contains catalyst fines; quenching the separated vaporous product with a liquid medium containing water and catalyst fines, in an amount sufficient for forming a light product fraction comprising light olefins and catalyst fines and a heavy product fraction comprising water, heavier hydrocarbons and catalyst fines; treating the light product fraction by contacting with a liquid substantially free of catalyst fines to provide a light product fraction having reduced catalyst fines content and a liquid fraction of increased fines content; compressing the light product fraction having reduced catalyst fines content; and recovering the light olefins from the compressed light product fraction.

IPC 1-7

C10G 3/00; C07C 1/20

IPC 8 full level

C07C 1/20 (2006.01); **C10G 3/00** (2006.01)

CPC (source: EP US)

C07C 1/20 (2013.01 - EP US); **C10G 3/49** (2013.01 - EP US); **C10G 3/62** (2013.01 - EP US); C07C 2529/83 (2013.01 - EP US); C07C 2529/85 (2013.01 - EP US); C10G 2400/20 (2013.01 - EP US); Y02P 30/20 (2015.11 - EP US); Y02P 30/40 (2015.11 - EP US)

C-Set (source: EP US)

C07C 1/20 + **C07C 11/02**

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2005027152 A1 20050203; **US 7038102 B2 20060502**; CN 102126903 A 20110720; CN 102126903 B 20140402; CN 1823152 A 20060823; CN 1823152 B 20120725; EA 009531 B1 20080228; EA 200600168 A1 20060825; EP 1656435 A1 20060517; EP 1656435 B1 20171108; US 2006149111 A1 20060706; US 7396513 B2 20080708; WO 2005017072 A1 20050224; WO 2005017072 A8 20050804

DOCDB simple family (application)

US 62996303 A 20030730; CN 200480020352 A 20040617; CN 201010586320 A 20040617; EA 200600168 A 20040617; EP 04755487 A 20040617; US 2004019341 W 20040617; US 36866206 A 20060306